Motivation of Academically Gifted Students

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## Abstract

The purpose of this study is to describe the impact of implementing different strategies on fifth grade academically gifted students in order to motivate them to perform to their full potential. My research project is based on the motivation of gifted students in the general education classroom. I will study eight academically gifted fifth grade students from my classroom located in a public school in Michigan. There are four female and four male subjects. All students in this study were identified as academically gifted after performing above the 99<sup>th</sup> percentile during intelligence testing. The students are capable of high level performance, but are performing at various levels. Throughout this study, I collected and examined student and parent questionnaires, interviewed previous teachers, observed the students and analyzed student scores. After analyzing all the data, I determined the use of technology, personal interests, and providing multiple choices for assignments will increase the motivation of gifted students in the general education classroom.

## Introduction

This school is located in Howell, Michigan which is located between Detroit and Lansing. The area is influenced by the large nearby universities, Michigan State University and University of Michigan. The school is located in a suburban area of Howell with many reputable neighboring school districts. The majority of the attending students are Caucasian from middle or upper class families. The school is a kindergarten through twelfth grade, tuition free, containing over one thousand students. I teach a classroom of twenty-two fifth graders. The students are aged between nine and eleven years old. There is a wide range of academic ability in the classroom; ranging from cognitively impaired to academically gifted. Families attend this

school by choice and travel from neighboring areas to attend. Many parents take an active role in their child's education and are a part of the parent council organization who volunteer often in the classroom. The general purpose of this study is to better understand and increase the motivation of the academically gifted students in my classroom. I related to Christy Munafo when she said, "I wanted to figure out what I could do as their teacher to help inspire them to want to get the better grades, to want to achieve more in my classroom," (Teachscape, Inc., 2007). I will incorporate individual student interests in my daily instruction and allow opportunities for collaboration and academic choice. I will allow students to choose different activities to demonstrate their knowledge of subject areas and will offer choices that are based on different types of intelligences and learning styles, in an attempt to meet the needs of all learners. I will create student interest and motivation surveys to better understand the students. I will incorporate student's individual interests and analyze the effect using those interests has/have on their performance. I will use knowledge gained from the interest survey and other data collection tools to determine what learning strategies will increase student potential. Lastly, I will provide opportunities for students to allow collaboration and group work. I will observe student performances while working independently and while working with others and compare the results.

#### **Area of Focus Statement**

The purpose of this study is to describe the impact of implementing different strategies on fifth grade academically gifted students in order to motivate them to perform to their full potential.

I will focus around the following research questions:

What is the effect of including individualized interests on student motivation?

What learning strategies will increase student potential and motivation to succeed?

How does group work or collaboration increase student performance?

"A variable is a characteristic of your study that is subject to change," (Mills, 2011, p. 61). In this action research project, my teaching style is a possible problematic variable. It is possible I will present a lesson using multiple strategies and observe results from the students. Student performance may improve, but it may not be a result of the action research strategies. Another possible problematic variable is the curriculum used and concepts covered throughout the study. Student achievement may increase as a result of more confidence or understanding of a certain subject area, not a result of the research strategies.

## **Review of Literature**

Gottfried, A.W., Gottfried, A.E. & Gruerin, D.W. (2006). A Fullerton Longitudinal Study: A Long-Term Investigation of Intellectual and Motivational Giftedness. *Journal for the Education of the Gifted*, Vol. 29, No. 4, p. 430-450.

This study followed a group of gifted children yearly and analyzed their course of intellectual and motivational development. This study is relevant to my research project because it includes information about motivation of gifted students. The study also shows the stability of giftedness for these children from elementary school through high school. This study allows me to understand giftedness through a child's entire school career. Some of the findings of the study

show how a child's success is dependent on their classroom learning environment. The study also shows that gifted students were more successful when they had a positive perception about their academic abilities and a positive perception of school.

Hebert, T., & Schreiber, C. (2010). An examination of selective achievement in gifted males. *Journal for the Education of the Gifted*, Vol. 33 No.4, p. 570-603.

This is a qualitative research study that examined two underachieving gifted males. The outcome of the study showed that these students needed academic challenges and real world examples and problems in order to be successful. They also performed better when the assignment helped them reach a personal goal. The teacher's personality and teaching style also determined student achievement. This study is relevant in my own research project because it follows my hypothesis that including challenging work, incorporating student interest, and building relationships with the students will increase student motivation. "They were willing to work hard if course content was personally meaningful and practical," (p. 585). This study also shares my educational value of the importance of intrinsic motivation. "External rewards designed by others were insignificant to these young men; the challenge of reaching a personally selected goal was much more important to them," (p. 582).

Meyers, Laurie. (2005) The inner life of the gifted child. *American Psychological Association*, Vol. 36, No. 11, p. 92-94.

This article focuses on what motivates the gifted child to learn. It includes many strategies for increasing motivation in the classroom. Some of the strategies match my hypothesis. The article states that work should be based on student interests and should be challenging. This article presented a unique idea for me about using group work to motivate gifted learners. The article describes creating an inquiry-driven classroom based around group work. It also gives the suggestion of improving student's self-assessment skills to increase their motivation. This article is very relevant to my research project as it addresses my problem and gives many possible solutions.

Siegle, D. & McCoach, B. (2005). Making a difference: Motivating gifted students who are not achieving. *Teaching Exceptional Children*, Vol. 38(1), p. 22-27.

The main focus of this article is how to motivate those students who are not reaching their potential in the classroom. It first defines motivated students, "[students] find value in their school experience," (p. 22). Motivated students believe they are completing meaningful work; they also believe they have the skills they need to be successful. The article describes some possible root causes of low levels of achievement. It offers some unique solutions of student goal setting, increasing immediate feedback, and encouraging students to compete with themselves by charting their own progress. This article will be helpful in my research project because it provided solutions to my problem and allowed me to see some possible reasons for the problem.

Wilson, H. E., & Adelson, J.L. (2010). Parenting perfectionists: Risk taking for risk evaders. *Parenting for High Potential*, p. 13-19.

This article gave me a different perspective of my research problem; the perspective of a parent of a gifted child. It allowed me to realize these students may be exhibiting unhealthy perfectionist behavior which prevents them from participating in activities that have the possibility for failure. Many of the solutions were suggested for the home, but could be easily adapted for school. This article is relevant as it describes students that I am seeing in my classroom and gives possible solutions for the behaviors.

Buescher, T.M. & Higham, S. (2009) Helping adolescents adjust to giftedness. *Michigan Alliance for Gifted Education*, Vol. 19, Issue 1, p.10-11.

This article focuses on adolescents and the problems that may occur along side giftedness. The article includes information about perfectionism, competitiveness, unrealistic assessment of their gifts, rejection from peers, parental pressures to achieve, unchallenging school programs, and increased expectations as a result of their giftedness. This article gave an interesting perspective that some students may actually be trying to hide their giftedness in attempt to fit in with their peer group. The article offers some suggestions for coping strategies for the students to help them be successful

VanTassel-Baska, J. & Wood, S. (2008) Myths about gifted students. William and Mary Center for Gifted Educaton, Vol. 12, p. 9-11.

This article focused on various myths about gifted students. The article offered research based responses to these myths. Many of the myths related directly to my research questions. The article states, "many choose to underachieve, negating the belief that left to their own devices in traditional educational settings they will undoubtedly succeed," (p. 9). The article states the importance of specialized gifted programs. It also gave information about the benefit of having gifted students working and interacting with peers of their own ability level. This article will be helpful because it offered some possible strategies and responses to traditional myths about gifted students.

Strop, J. (2008) When "I'm bored!" Doesn't call for more challenge. *Michigan Alliance for Gifted Education*, Vol. 18, Issue 4, p. 7-8.

This is an interesting article which gives information about gifted students and their motivations for accepting challenges. Students may report they are feeling bored in class, this article analyzes the possible meanings of being "bored" in school. The article states that students may; truly be bored, the work may be too hard, the student may not like the work, the student may fear failure, the student may prefer other work, or the student may feel if they do some work they will be expected to do more and harder work, (p. 7). This article will be useful for my research because it offers possible reasons for underperforming gifted students.

Dweck, C. (2007) The perils and promises of praise. *Educational Leadership*, Issue. October 2007, p. 34-38.

This article gives suggestions for motivation of students. It discusses the use of praise in the classroom to increase student motivation and therefore increase student achievement. The article specifically gives the suggestion to praise students on the process of learning instead of the outcome. When praising the process instead of the product, students will understand that quality work requires hard work and effort. This article will be helpful for me because it offered a new suggestion I had not previously thought of for the research project.

Dweck, C. (2007) *Mindset: The new psychology of success*. Ballentine Books, Random House Publishing Group.

This book discusses theories of intelligence, specifically the 'growth' and 'fixed' mindsets. Essentially, the 'growth mindset' is the belief that effort and hard work can affect an individual's performance and their failures and successes in life. The 'fixed mindset' is the belief that intelligence is set at birth with little possible chance to change the 'amount' and that success or failure is explained by an individual's ability. This theory relates to academically gifted children and their perspective of their own ability and their manner of taking on new academic challenges. This book is helpful in my research project because it offers yet another resource of strategies for motivating students.

## **Research Process**

I have created nine data collection tools for my research project. These tools are outlines in the data collection matrix (see Appendix A). Of the nine tools, six are quantitative tools, three are qualitative. I have created surveys and interviews in order to better understand the motivation of the gifted students. I also arranged checklists and data collection pages to collect information in an organized fashion.

The quantitative data will allow me to see the results in a numerical way, while the qualitative data will allow me to better understand the reasons for the results. I will give the students and parents the surveys to help me gain insight to the student motivation. I will use the data from the surveys and interviews to implement different strategies in the classroom and begin collecting data on student performance. I have included a variety of different data collection tools in order to triangulate my data.

Both the student and parent survey will allow me to gain some insight about student motivation in the classroom. I will gain information about their feelings towards school and their peers. It will benefit me to have this base of knowledge at the beginning of my research project. The student questionnaire will give me unique information about each child. This will allow me to incorporate individual interests in the curriculum and create peer interest groups amongst the class.

I will be collecting assessment data from the performance series and advisory assignments. This assessment data will allow me to analyze patterns for student work and track changes in performances as well. This data will give me specific proof of student achievement and help me set goals for students.

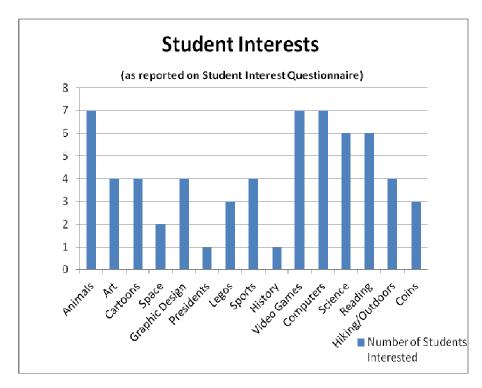
I will be collecting and analyzing student work samples and observing students in the classroom. This data will allow me to see what types of assignments and working environments are most successful for the students. I will observe collaborative and individual work to analyze the different outcomes. Students will also complete reflections on their feelings towards various methods and when they feel most successful and challenged in the classroom.

Using a variety of data collection tools will allow me to get a well-rounded picture of my students and their experience in the classroom. I will be able to determine what methods are most successful when increasing student motivation.

#### **Data Analysis:**

What is the effect of including individualized interests on student motivation?

Eight academically gifted students completed a student questionnaire (see Appendix B) to share their interests and learning style with me. One hundred percent of the students who completed the survey, expressed they prefer learning by reading. The students who participated in this study are all reading above grade level. Fifty percent of the students also reported they prefer learning by putting things together or experimenting with things. Six out of eight students listed video games and computers as a personal interest. Technology is of high interest and the incorporation of technology in the classroom increases motivation. Seven of eight students expressed their least favorite subject in school to be writing. Four of eight students reported they are not interested in what they are learning at school. Students listed a variety of interests on their questionnaire with the highest interests being animals, video games, and computers. Including these topics in the classroom would increase student motivation.



Eight parents of academically gifted students completed a Likert scale survey (see Appendix C) concerning their child's motivation and performance. Parents responded to a series of statements indicating whether they agreed, disagreed, were undecided with each statement. The following point values were assigned for responses: agree = 3, undecided = 2, disagree = 1. The average of the responses was 1.9. One hundred percent of the parents agreed it is important for their child to get good grades in school. All the parents also agreed their child values their education. Only 1 of 8 of the parents agreed their child was working to their full potential in the classroom. The parents also reported 7 of 8 students are not completing the majority of their assignments at school. Seventy-five percent of the parents agreed their child enjoys a challenge and expressed appropriately challenging work would increase their child's motivation.

I interviewed four teachers who have taught the focused students in previous years.

Each was contacted and interviewed in person and were asked a series of the same questions (see Appendix D). The information gathered assisted in finding common areas of interest amongst

the students and discovering alternative teaching strategies that were successful in the past.

When evaluating the information from the previous teachers, the comments about individual student interests matched the information I found from the student interest questionnaire. All teachers reported the targeted students did not work to their full academic potential last year and expressed concern with the students' achievement.

What learning strategies will increase student potential and motivation to succeed?

I specifically observed the targeted students throughout my research. These observations allowed me to evaluate what types of assignments and working environments were most successful. I took notes during the observations on a data collection chart (see Appendix E). The first activity I observed was an independent reading assignment involving history. Students were given a short mini-lesson and then expected to return to their seats to complete a reading selection and answer questions. At the end of the session, students were invited to share their findings with others and discuss the information. Throughout this activity I observed that one-half of the targeted students were engaged and participating in the assignment. The other one-half were reading a book they had chosen, sitting quietly, doodling or daydreaming. None of the unengaged students were disrupting the class at the observed time. The instructing teacher approached the disengaged students and attempted to redirect them. Those students who were reading a different book went back to the appropriate work. Two students continued to sit quietly and did not complete the assignment. When students were invited to share and discuss their findings, the engaged students were happy to participate in the discussion and share with a

partner. Those students who were not engaged did not finish the assignment, and therefore were unable to share any information with the group.

The second observation was during another history lesson. This activity involved working with a partner to research a famous person from history, complete a graphic organizer with facts about them, complete an illustration, and finally, present the information to the class. Students were assigned their historical individual, but chose their own partners and were given the opportunity to research using books and the internet. This activity lasted four class periods. Throughout the activity all of the targeted students were engaged. Six of the eight students chose a partner to work with, while two students requested to work alone. All students requested to use the internet to gather more research than the books provided. All of the students presented their work to the class and completed the assignment in a quality fashion.

The two observations proved student engagement is directly linked to student choice and technology. The students were more engaged when technology was involved and when the students were given opportunities to make their own choices in their learning.

I collected and analyzed work samples to help me determine what types of work allowed for the most success for the students. I collected one work sample per student per subject area each week for a total of four weeks. The work samples were organized in a student work portfolio. At the end of the four weeks each student had twenty work samples. The work samples were chosen by the student or me. I asked the student to select a piece of work they were most proud of from the week, if they were unable to decide, I chose for them. I looked closely at all the students' work and categorized the work samples into the following chart:

|                | Group<br>Work | Technology | Choice   | Long<br>Term | Daily<br>Class<br>Work |
|----------------|---------------|------------|----------|--------------|------------------------|
| Science        | 4             | 10         | 2        | 16           | 0                      |
| Social Studies | 4             | 12         | 4        | 10           | 2                      |
| Math           | 10            | 16         | 0        | 0            | 6                      |
| Reading        | 0             | 18         | 10       | 4            | 0                      |
| Writing        | 0             | 14         | 15       | 0            | 3                      |
| Total          | 18 (11%)      | 70 (44%)   | 31 (19%) | 30 (19%)     | 11 (7%)                |

While evaluating the student work samples, it was clear the students were most proud and engaged during assignments which included technology. Almost half (44%) of the collected assignments included some form of technology. This technology included internet research, typing, online math game scores, or multi-media reports. The students also showed engagement when the assignment included student choice or was a long term project. The targeted students appeared more motivated to complete a project that took place over multiple class periods. These projects tend to be more challenging and complex and allow for more flexibility and creativity. Only 7% of the work samples were from daily class assignments, such as a math worksheet or writing prompt.

Another data source I used was data from student advisory assignments. This data allowed me to analyze patterns for student work and track changes in performances as well. Students are given a weekly advisory sheet which displays their grades of their assignments for the week; it includes any missing or incomplete assignments as well. I used a checklist for

tracking the data (see Appendix F). I analyzed and averaged data from 7 weeks of assignments in the following chart:

| Student | Average # of assignments per week | Average # of missing or incomplete assignments | Average # of<br>complete<br>assignments | Average score<br>on math<br>assignments | Average score on reading assignments |
|---------|-----------------------------------|--|---|---|--------------------------------------|
| 1       | 14                                | 2  | 12                                      | 90%                                     | 95%                                  |
| 2       | 14                                | 1  | 13                                      | 91%                                     | 94%                                  |
| 3       | 14                                | 9  | 5                                       | 77%                                     | 65%                                  |
| 4       | 14                                | 7  | 7                                       | 72%                                     | 74%                                  |
| 5       | 14                                | 0  | 14                                      | 99%                                     | 95%                                  |
| 6       | 14                                | 7  | 7                                       | 73%                                     | 75%                                  |
| 7       | 14                                | 3  | 11                                      | 90%                                     | 90%                                  |
| 8       | 14                                | 10   | 4                                       | 62%                                     | 52%                                  |
| Average | 14                                | 4.875  | 9.125                                   | 82%                                     | 80%                                  |

After analyzing the data, it was clear that those students who failed to turn in assignments had a lower average score in math and reading assignments. Amongst the students, there were more missing or incomplete reading assignments and reading had a slightly lower average score. There were four of eight students who completed an average of only one-half or less of their weekly assignments. When examining closer, those students did finish most social studies and science assignments, but failed to complete daily math worksheets or reading comprehension practice assignments. All of the targeted students completed the long term assignments in a quality fashion during this time frame.

The observations, work samples, and assignment checklists proved that including student choice and technology motivates students to perform to their potential. Long term projects also motivate students to perform to a higher level over a period of time. Daily class work, such as worksheets and text book assignments, proved to be unimportant and meaningless to the observed students.

How does group work or collaboration increase student performance?

The eight students completed a Likert Scale survey (see Appendix G) about their motivation and feelings towards school and their peers. Students responded to a series of statements indicating whether they agreed, disagreed, were undecided with each statement. The following point values were assigned for responses: agree = 3, undecided = 2, disagree = 1. The average of the responses was 2.3.

One hundred percent of the students agreed that the work they do in school affects their future. Five of eight students reported they enjoy helping others understand complicated class work. Six of eight students also stated working together does not help them learn. Seven of eight stated they are not a role model in the classroom. Only two of eight students stated they get to make choices about what and how they learn. When asked to complete the sentence 'School is \_\_\_\_\_\_.' Students provided a range of responses including annoying, not fun but important, over-rated, fun, sometimes fun, great, and a lot of work.

According to the survey there is not a clear connection between working together and student motivation. Some students enjoy group work, others do not. The survey does show that some students have a negative attitude towards school, which directly affects student performance.

Another data source I analyzed was a standardized performance series test. Students take this computerized assessment twice a year in reading and in math. This is an independent assessment taken in the fall and spring. The goal of the assessment is to show growth over the school year. I recorded student scores on a data chart (see Appendix H). The student's scores are reported as a scaled score and are displayed in the charts below:

| Student          | Math Score 1 | Math Score 2 | Difference in Score |
|------------------|--------------|--------------|---------------------|
| 1                | 2617         | 2768         | +151                |
| 2                | 2699         | 2890         | +191                |
| 3                | 2621         | 2800         | +179                |
| 4                | 2914         | 3108         | +194                |
| 5                | 2594         | 2598         | +4                  |
| 6                | 2567         | 2607         | +40                 |
| 7                | 2925         | 2799         | -126                |
| 8                | 2773         | 2834         | +61                 |
| Average          | 2714         | 2801         | +87                 |
| District Average | 2374         | 2508         | +134                |

| Student | Reading Score 1 | Reading Score 2 | Difference in Score |
|---------|-----------------|-----------------|---------------------|
|         |                 |                 |                     |
| 1       | 3031            | 3058            | +27                 |
|         |                 |                 |                     |
| 2       | 3045            | 3198            | +153                |
|         |                 |                 |                     |
| 3       | 2903            | 3026            | +123                |
|         |                 |                 |                     |
| 4       | 3125            | 3351            | +226                |
|         |                 |                 |                     |

| 5                | 2927 | 3055 | +128 |
|------------------|------|------|------|
| 6                | 3043 | 3095 | +52  |
| 7                | 3163 | 3119 | -44  |
| 8                | 3028 | 3050 | +22  |
| Average          | 3033 | 3119 | +86  |
| District Average | 2550 | 2698 | +148 |

These scores show all focus students performed above the district average in all subject areas. Overall, the reading scores are higher, but the mathematics assessment scores are still above average. When averaging the targeted students' growth from the fall to spring, students gained an average of 87 points in math and 86 points in reading. Although the scores are above district average, the district average growth is much higher at a gain of 134 and 148 points. The academically gifted students did well on the assessments, but did not grow throughout the year as much as the rest of the district. While looking closely at the scores, I noticed a large difference in the amount of growth amongst the students. One student's score did decrease in both reading and math. This assessment is completely individual, and student scores relate directly to their effort and motivation during the testing period. The overall scores show the students did grow over the year and put forth effort into this assessment.

Another data source was a Student Reflection worksheet the students completed after multiple classroom assignments (see Appendix I). I compiled and analyzed the data from the students' completed reflections from ten assignments. Students completed the reflection after various classroom activities including daily individual assignments, group work, and long term projects. Students gave themselves a score between 1 and 5 on how often they used a variety of

work habits. A score of a 1 means they used the score very little, a score of a 5 means they used the habit frequently. The purpose of this data source was to evaluate how the targeted students work with others; therefore I focused the data examination on the work habits relating to working with others. The data is reported in the following chart:

| Student | Listening to others | Getting along with others |
|---------|---------------------|---------------------------|
| 1       | 3.1                 | 3.4                       |
| 2       | 4.5                 | 5                         |
| 3       | 3.3                 | 3.6                       |
| 4       | 4                   | 4.1                       |
| 5       | 2.2                 | 3.5                       |
| 6       | 2.8                 | 3.4                       |
| 7       | 3.7                 | 3.9                       |
| 8       | 2.3                 | 3.4                       |
| Average | 3.2                 | 3.8                       |

The data above shows the average score students rated themselves on the work habits of 'Listening to others.' and 'Getting along with others.' Overall, students rated themselves higher in the category of 'Getting along with others.' This information did not show a clear pattern, but showed some students feel they displayed these habits frequently, others did not. Throughout the study, student performance did improve but I am unable to determine if group work and collaboration had an impact on student performance.

After collecting the data on eight individuals and comparing the information and facts from the data sources both before and after instructional techniques were put into place, it is evident that incorporating student choice, technology, projects and student interests will lead to higher performance and motivation in students.

## **Action Plan (Conclusion)**

Based on the matters that have appeared from this study, I plan on making adjustments within my classroom and in my future classrooms. These adjustments should be made for all students, and will benefit the entire class, but specifically those who are not performing to their full potential. When each student enters the classroom at the beginning of the year, they will complete a student interest questionnaire. This information will be valuable so I can incorporate the interests in the daily lessons as often as possible. I will modify classroom instruction based on student interests. I will also ask parents to complete a questionnaire about their child to help me better understand the child's strengths, weaknesses, and interests.

Early in the school year, I will meet with the previous teachers to gain knowledge about the students' work habits and strengths and weaknesses. These teachers have valuable information that I will be able to use in my classroom instruction.

I will work to incorporate technology as often as possible in the classroom. Students will work on computers to research, type, and to create or view multi-media presentations. This use of technology will motivate students to perform to their full potential. I will also incorporate multiple options for assignment completion. When students have the ability to choose a way to complete a task, they are more likely to put forth more effort. I will also integrate more projects into the curriculum. Students were more likely to put more effort into the projects than into daily worksheets. This will allow me to meet the individual needs of each student in the classroom; therefore maximizing their success.

I plan to share this data by submitting it to an educational journal. It was challenging to find resources about the topic of underachieving academically gifted students and I would like to

share this information with other educators. This data may help more underachieving academically gifted students become more successful in the general education classroom.

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## Appendix A

| Research Questions  | 1                        | 2                          | 3                  |
|---|--------------------------|----------------------------|--------------------|
| What is the effect of including individualized                                      | Student Questionnaire    | Parent Survey              | Teacher Interview  |
| interests on student motivation?  | Questionnaire            |                            |                    |
| What learning strategies will increase student potential and motivation to succeed? | Observation<br>Checklist | Student Portfolio          | Advisory Data      |
| How does group work or collaboration increase student performance?                  | Student Survey           | Performance Series<br>Data | Student Reflection |

I have created nine data collection tools for my research project. These tools are outlines in the data collection matrix (see Appendix A). Of the nine tools, six are quantitative tools, three are qualitative. I have created surveys and interviews in order to better understand the motivation of the gifted students. I also arranged checklists and data collection pages to collect information in an organized fashion.

The quantitative data will allow me to see the results in a numerical way, while the qualitative data will allow me to better understand the reasons for the results. I will give the students and parents the surveys to help me gain insight to the student motivation. I will use the data from the surveys and interviews to implement different strategies in the classroom and begin

collecting data on student performance. I have included a variety of different data collection tools in order to triangulate my data.

Both the student and parent survey will allow me to gain some insight about student motivation in the classroom. I will gain information about their feelings towards school and their peers. It will benefit me to have this base of knowledge at the beginning of my research project. The student questionnaire will give me unique information about each child. This will allow me to incorporate individual interests in the curriculum and create peer interest groups amongst the class.

I will be collecting assessment data from the performance series and advisory assignments. This assessment data will allow me to analyze patterns for student work and track changes in performances as well. This data will give me specific proof of student achievement and help me set goals for students.

I will be collecting and analyzing student work samples and observing students in the classroom. This data will allow me to see what types of assignments and working environments are most successful for the students. I will observe collaborative and individual work to analyze the different outcomes. Students will also complete reflections on their feelings towards various methods and when they feel most successful and challenged in the classroom.

Using a variety of data collection tools will allow me to get a well-rounded picture of my students and their experience in the classroom. I will be able to determine what methods are most successful when increasing student motivation.

## Appendix B

## **Student Interest Questionnaire**

| 1. | What do you | like doing | most when | you have | free time? |
|----|-------------|------------|-----------|----------|------------|
|----|-------------|------------|-----------|----------|------------|

- 2. My interests at school are:
- 3. My interests at home are:
- 4. Are you a collector? List the things you collect.
- 5. What do you think you are good at?
- 6. What do you like to do the least?
- 7. I prefer learning by: (You may choose more than one.)
  - a. Reading
  - b. Listening
  - c. Watching people do things
  - d. Putting things together
  - e. Experimenting with things
- 8. I prefer working:
  - a. Alone
  - b. With a friend
  - c. With an adult
  - d. With a group
- 9. Do you attend any lessons outside of school? List them here.
- 10. What career do you want when you grow up?
- 11. Do you have any ideas for projects you would enjoy completing this year? List them here.

| Do you enjoy learning abou  | nt the items below? Place a                  | <b>check</b> ( $\sqrt{\ }$ ) next to the items you <i>like</i> |
|-----------------------------|--|--|
| learning about. Place a sta | <b>r</b> (*) next to the items you <i>lo</i> | eve learning about.  |
| Animals                     | Art  | Cartoons   |
| Space                       | Graphic Design                               | Presidents   |
| Legos                       | Sports                                       | History  |
| Video Games                 | Computers                                    | Science  |
| Reading                     | Hiking/Outdoors                              | Coins  |

# Appendix C

# **Parent Survey**

|    | priate response |                  | ow much you agree with the statement by circling the ny additional comments or clarifications beside each |
|----|-----------------|------------------|---|
| 1. | It is importa   | nt for my chil   | d to get good grades in school.   |
|    | Agree           | Undecided        | Disagree  |
| 2. | My child is o   | challenged with  | h their class work at school.   |
|    | Agree           | Undecided        | Disagree  |
| 3. | My child is a   | motivated to d   | o well in school.   |
|    | Agree           | Undecided        | Disagree  |
| 4. | My child is v   | working to the   | ir full potential in the classroom.   |
|    | Agree           | Undecided        | Disagree  |
| 5. | My child val    | lues school and  | l their education.  |
|    | Agree           | Undecided        | Disagree  |
| 6. | My child con    | mpletes the ma   | jority of their assignments at school.  |
|    | Agree           | Undecided        | Disagree  |
| 7. | My child wo     | orks well with 1 | their peers.  |
|    | Agree           | Undecided        | Disagree  |
| 8. | My child enj    | joys a challeng  | e.  |
|    | Agree           | Undecided        | Disagree  |
| 9. | My child is p   | passionate abo   | ut certain topics. (List them below, please)  |
|    | Agree           | Undecided        | Disagree  |
| 10 | . Does vour cl  | hild have respo  | onsibilities at home? (List them below, please)   |

- 11. Does your child use a computer at home? If so, what do they do on the computer?

|             |        | 1.   | $\mathbf{r}$ |
|-------------|--------|------|--------------|
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|             |        |      |              |

|    | Teacher Interview  |
|----|--|
| 1. | How did this student perform academically in the classroom last year?  a. Math?  b. Reading?  c. Writing?  d. Science?  e. Social Studies? |
| 2. | Did this student work well with other students in the classroom? Any particular students?  |
|    | Does this student have any topics they are passionate about?   |
| 4. | What strategies were successful in the classroom last year?  |
| 5. | What are the student's strengths? Weaknesses?  |
| 6. | Any other useful information?  |

|     | 1.    |    |
|-----|-------|----|
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## **Classroom Observation**

| Date:               |  |
|---------------------|--|
| Classroom Activity: |  |

| Student Name | Engagement | Interaction with Peers | Learning<br>Strategy Used | Other<br>Comments |
|--------------|------------|------------------------|---------------------------|-------------------|
|              |            |                        |                           |                   |
|              |            |                        |                           |                   |
|              |            |                        |                           |                   |
|              |            |                        |                           |                   |
|              |            |                        |                           |                   |
|              |            |                        |                           |                   |
|              |            |                        |                           |                   |
|              |            |                        |                           |                   |
|              |            |                        |                           |                   |

# Appendix F

## Weekly Student Advisory Checklist

(Students are given a weekly advisory sheet which displays their grades of their assignments for the week – it includes any missing or incomplete assignments as well)

## Student Name

|             | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 |
|-------------|--------|--------|--------|--------|--------|--------|--------|
|             |        |        |        |        |        |        |        |
| Total # of  |        |        |        |        |        |        |        |
| assignments |        |        |        |        |        |        |        |
| и с         |        |        |        |        |        |        |        |
| # of .      |        |        |        |        |        |        |        |
| missing or  |        |        |        |        |        |        |        |
| incomplete  |        |        |        |        |        |        |        |
| assignments |        |        |        |        |        |        |        |
| Percentage  |        |        |        |        |        |        |        |
| of complete |        |        |        |        |        |        |        |
| assignments |        |        |        |        |        |        |        |
| Average     |        |        |        |        |        |        |        |
| score on    |        |        |        |        |        |        |        |
| math        |        |        |        |        |        |        |        |
| assignments |        |        |        |        |        |        |        |
| Average     |        |        |        |        |        |        |        |
| score on    |        |        |        |        |        |        |        |
| reading     |        |        |        |        |        |        |        |
| assignments |        |        |        |        |        |        |        |
| Other       |        |        |        |        |        |        |        |
| Comments    |        |        |        |        |        |        |        |

# **Student Survey**

Read each sentence and indicate how much you agree with the statement by circling the appropriate response.

| 1)         | I'm interested in what I'm learning at school. |                  |                                 |  |  |  |  |
|------------|--|------------------|---------------------------------|--|--|--|--|
|            | Agree  | Undecided        | Disagree                        |  |  |  |  |
| 2)         | Working together with others helps me learn.   |                  |                                 |  |  |  |  |
|            | Agree  | Undecided        | Disagree                        |  |  |  |  |
| 3)         | I get to make                                  | choices about    | what and how I learn.           |  |  |  |  |
|            | Agree  | Undecided        | Disagree                        |  |  |  |  |
| 4)         | The work I d                                   | o in school affo | ects my future.                 |  |  |  |  |
|            | Agree  | Undecided        | Disagree                        |  |  |  |  |
| 5)         | Doing well in                                  | school is impo   | ortant to me.                   |  |  |  |  |
|            | Agree  | Undecided        | Disagree                        |  |  |  |  |
| <b>6</b> ) | I am a role m                                  | odel in the cla  | ssroom.                         |  |  |  |  |
| Agr        | ree  | Undecided        | Disagree                        |  |  |  |  |
| 7)         | I enjoy helpi                                  | ng others und    | erstand complicated class work. |  |  |  |  |
| Agr        | ree  | Undecided        | Disagree                        |  |  |  |  |
| 8)         | School is                                      |                  | •                               |  |  |  |  |

# Appendix H

## Student Performance Series Score Data Collection

(Students take the Performance Series standardized test on the computer twice times a year. The students are tested in reading and math.)

| <b>Student Name</b> | Score 1 | Score 2 | Difference in Score |
|---------------------|---------|---------|---------------------|
|                     |         |         |                     |
|                     |         |         |                     |
|                     |         |         |                     |
|                     |         |         |                     |
|                     |         |         |                     |
|                     |         |         |                     |
|                     |         |         |                     |
|                     |         |         |                     |
|                     |         |         |                     |

# Appendix I

## **Student Reflection**

Rate yourself on your use of the following habits during today's assignment. 1 means you used the habit very little, 5 means you used the habit frequently.

| Persistence               | 1 | 2 | 3 | 4 | 5 |
|---------------------------|---|---|---|---|---|
| Listening to others       | 1 | 2 | 3 | 4 | 5 |
| Thinking flexibly         | 1 | 2 | 3 | 4 | 5 |
| Striving for accuracy     | 1 | 2 | 3 | 4 | 5 |
| Applying Past Knowledge   | 1 | 2 | 3 | 4 | 5 |
| Getting Along with Others | 1 | 2 | 3 | 4 | 5 |
| Creating or Innovating    | 1 | 2 | 3 | 4 | 5 |
| Taking Risks              | 1 | 2 | 3 | 4 | 5 |